

CLAIMS

1. A rear housing for a compressor having a cylinder block receiving lower pressure fluid from the rear housing and providing higher pressure fluid back to the rear housing, the rear housing comprising:

an annular outer wall;

an annular inner wall circumscribed by the outer wall;

a first chamber defined by the inner wall;

a second chamber defined between the inner and outer walls; and

an annular isolation wall, the isolation wall and inner wall defining an isolation chamber positioned between the first and second chambers.

2. The rear housing of claim 1, wherein the isolation wall is disposed between the inner and outer walls.

3. The rear housing of claim 1, wherein the isolation wall is disposed inside the inner wall.

4. The rear housing of claim 1, wherein the isolation wall includes a first portion extending axially and a second portion extending radially, the second portion of the isolation wall engaging the inner wall.

5. The rear housing of claim 1, wherein the rear housing includes a first end facing the cylinder block and a second end facing away from the cylinder block, and wherein the isolation chamber opens axially towards the second end.

6. The rear housing of claim 5, wherein the isolation chamber is open to air.

7. The rear housing of claim 1, wherein the isolation chamber completely separates the first and second chambers.

8. The rear housing of claim 1, wherein the isolation chamber partially separates the first and second chambers.

9. The rear housing of claim 8, wherein the inner and outer walls extend axially a first distance, and the isolation wall extends axially a second distance that is less than the first distance.

10. The rear housing of claim 8, wherein the first and second chambers extend axially a first distance, and the isolation chamber extends axially a second distance that is less than the first distance.

11. The rear housing of claim 8, wherein the isolation chamber extends partially circumferentially around the first chamber.

12. The rear housing of claim 1, wherein the first chamber is a suction chamber providing lower pressure fluid to the cylinder block, and wherein the second chamber is a discharge chamber receiving higher pressure fluid from the cylinder block.

13. A rear housing for a compressor having a cylinder block receiving lower pressure fluid from the rear housing and providing higher pressure fluid back to the rear housing, the rear housing comprising:

- an annular outer wall;

- an annular inner wall circumscribed by the outer wall;

- a first chamber defined by the inner wall;

- a second chamber defined between the inner and outer walls;

- an annular isolation wall, the isolation wall and inner wall defining an isolation chamber positioned between the suction and discharge chambers; and

- the rear housing including a first end facing the cylinder block and a second end facing away from the cylinder block, the isolation chamber opening axially towards the second end.

14. The rear housing of claim 13, wherein the isolation chamber is open to air.

15. The rear housing of claim 13, wherein the isolation wall is disposed between the inner and outer walls.

16. The rear housing of claim 13, wherein the isolation wall is disposed inside the inner wall.

17. The rear housing of claim 13, wherein the isolation wall includes a first portion extending axially and a second portion extending radially, the second portion of the isolation wall engaging the inner wall.

18. The rear housing of claim 13, wherein the isolation chamber completely separates the first and second chambers.

19. The rear housing of claim 13, wherein the isolation chamber partially separates the first and second chambers.

20. The rear housing of claim 19, wherein the suction and discharge chambers extend axially a first distance, and the isolation chamber extends axially a second distance that is less than the first distance.

21. The rear housing of claim 13, wherein the isolation chamber extends partially circumferentially around the suction chamber.

22. The rear housing of claim 13, wherein the first chamber is a suction chamber providing lower pressure fluid to the cylinder block, and wherein the second chamber is a discharge chamber receiving higher pressure fluid from the cylinder block.